Please file gorgoot7

## **Bond Release Findings**

Task 1811

| Mine Name: White Cap #8               | I.D. No.: <u>S0150047</u>                 |
|---------------------------------------|---|
| Operator: Gypsum Resource Development | Mineral Ownership: BLM                    |
| 1947 North 2050 East                  | Surface Ownership: BLM                    |
| Layton, Utah 84040                    | Permit Term: Originally permitted in 1990 |

Disturbed Area: 4.85 acres Regraded: 4.85 acres Reseeded: 4.85 acres Acres Bonded: 4.85 acres

Acres Proposed for Partial Release: 4.85 acres Acres Recommended for Partial Release: 4.85

acres

Surety

Amount: \$10,000.00

Form: Certificate of Deposit

Amount Proposed for Release: \$9000.00

Amount Recommended for Release: \$7100.00 (if grizzly is removed)

Amount Remaining: \$2900.00

### **Setting and Premining Environment**

The mine is adjacent to the road leading to The Wedge overlook in the San Rafael Swell in Emery county. The premining land use was wildlife habitat and grazing. There is a nearby watering trough, so the area receives a lot of use by cattle. Soils are derived from a combination of gypsum, shale, and sandstone. The vegetation is a salt desert shrub community dominated by shadscale, Indian ricegrass, and galleta. The topography is fairly flat with some rolling hills and buttes; the mine itself straddles a hill. There are no perennial drainages, and the area is flat enough that even ephemeral drainages are small. Average annual precipitation is less than eight inches.

#### **Operations**

There are no ongoing operations; the site is completely reclaimed except for removing a grizzly.

The operator stripped and stockpiled topsoil and overburden then extracted the underlying gypsum. Most of the topsoil apparently had a cryptogamic crust, and a stipulation from the BLM required that this material be stockpiled separately. I assume the operator blasted and do not know whether a crusher was on site. Two grizzlies were used to screen the material before it was shipped to a processing plant in Huntington. There were no other surface facilities, and the operator did not use deleterious materials.

#### **Hole Plugging**

It appears the operator drilled some shallow exploration holes and mined through them. It is not known exactly where these holes were located or if they were plugged, but there are no signs of them.

#### Reclamation

Reclamation grading was completed March 30 and April 2, 2007, and the area was seeded April 5, 2007.

The only reclamation remaining is to remove a grizzly.

# Mine Engineering

A gypsum stockpile was first graded into the mine pit, then the entire area was covered with overburden and topsoil that had been windrowed around the edge of the site. There were some near-vertical slopes, but nothing was more than about 15 feet high. These slopes were backfilled to the point that they are

**Bond Release Findings** White Cap #8 S0150047

stable, and there is no danger to the public. The steepest reclaimed slopes are not extensive and are about 3-4h:1v.

Before mining, the center of the mine was the crest of a hill, and the mined area is now a gentle swale. Although it looks different than it probably did before mining, it blends well with surrounding topography. Once vegetation has become established, I do not expect any negative visual impact.

There were no variances.

I have two concerns with the way the site was graded. There are some flat areas near the road where people may decide to park, and these areas may encourage ATV use over the mine site.

The gypsum that was backfilled into the pit was mostly coarse material, and it is possible the overlying overburden and topsoil will be piped into the interspaces within this material. This could adversely affect vegetation cover over this area, but I do not believe there would be any other problems.

## Hydrology

There were about two or three minor ephemeral drainages that crossed the area before it was disturbed, and these were blocked by windrows during mining. These were all restored during regrading. The pit impounded water during the mining operation, but it has been filled to where it should have positive drainage. As discussed above, it is possible some of the overburden and soil could be piped into the interspaces between the coarse pieces of gypsum.

The site was left rough enough, and the terrain is gentle enough, that I do not expect erosion to become a downent date problem.

All roads created for this operation have been regraded.

### Revegetation

Topsoil, including the cryptogamic soils, were replaced as required, and the site was seeded three days after grading was completed. The seed mix included shadscale, galleta, winterfat, Russian wild rye, Indian ricegrass, and fourwing saltbush. The soil surface was still loose and a crust had not formed when the seed was applied.

The operator left the site rough with some rocks on the surface. Much of the soil had very few rocks, but there were some. The operator was asked to leave as many rocks as reasonably possible on the surface, and while this attempt was made, there were not as many rocks as I would have liked.

The operator is not seeking release from revegetation requirements. It is not known whether anything has started to grow. It is a concern that the site was seeded in the spring, but since many of the species have strong dormancy mechanisms, I expect many of the seeds will not germinate until the spring of 2008.

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### Recommendation

I recommend that the operator be required to remove the grizzly before any surety reduction. Once this has been done, the surety could be reduced to \$2900.00. This amount was determined as follows:

\$1000.00 Mobilize D6 dozer and operate for one-half day (estimate from Nielson Construction) \$1400.00 Broadcast seed. This is a standard amount from Division's bonding spreadsheet.

\$2400.00 Subtotal \$240.00 10% contingency \$261.64 Escalate three years at 3.2%

\$2901.64 Total, Round to \$2900.00

Dermit I and

May 17, 2007

Date

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